OUR ADVERTISERS

American Gas Manufacturers Co.
American Sheet and Tin Plate Co.
Bailey Meter Co.
Block's Floral Co.
Brown & Sharp
Carper's Cafeteria
Cast Iron Pipe
The Crane Co.
Columbus Blank Book Co.
College of Engineering, O. S. U.
Cotner's Pharmacy
Du Pont
The Foundation Co.
Franklin Asphalt
General Electric Co.
Gust's Shoe Repair
Hercules Powder Co.
Hyatt Roller Bearings
Huffman-Wolfe Co.
Hennicks
Koehring
Legg Printing Co.
Lufkin Rule Co.
Ohio State Lantern
Long's College Book Store
Mississippi Wire Glass Co.
Mt. Vernon Bridge Co.
National Paving Brick Co.
Otis Elevator Co.
The Pease Co.
Phillips Printing Co.
Rider's Pen Shop
Timken Roller Bearings
Westinghouse E. & M. Co.
Western Electric Co.
Weinman Pump Co.
J. G. Wilson Co.
Varsity Supply Co.

INDUSTRIAL BUILDINGS SHOULD BE WELL LIGHTED.

From the employer's viewpoint, the big difference between men who work out of doors and those who perform tasks inside the building, is the factor of light. Daylight furnishes sufficient illumination outside during the daytime working hours for men to pursue their tasks efficiently and safely. But the proposition of getting enough daylight into the interior of industrial buildings, requires some thought.

It is not a difficult problem by any means, and any employer can take advantage of daylight and utilize it for lighting his building during the daytime, if he desires. It is an excellent light, especially suitable for the eyes, reducing eye strain and eye weariness to a minimum, and has the great economic advantage of costing nothing.

To utilize daylight to the utmost, we must first provide means for allowing daylight rays to enter the interior of buildings in sufficient quantity—namely, proper and adequate windows and skylights. Many excellent instances of buildings designed with a due regard to the importance of daylight lighting can now be seen in many of our industrial cities. Such buildings present the appearance of being practically all windows—"window walled," as they are termed—and this type of daylight construction is coming rapidly into favor, because it constitutes a more healthy building for large numbers of employes, both from the lighting and ventilation standpoints.

Among those who have constructed this type of modern industrial building may be mentioned: The Shredded Wheat Co., Gillette Safety Razor Co., Lyon & Healy Piano Co., H. J. Heinz Co., Corona Typewriter Co., Skinners Macaroni Co., Grape Juice Co., Dodge Bros., Nelson Valve Co., Piston Ring Co., Remington Arms Co., and a great many others.

The Larkin Co., Philadelphia, has erected a building almost entirely glass, 85% being windows, and the Loomis Breaker, operated by the D. L. & W. R. R. Co., Nanticoke, Pa., is literally a glass house, being 93.5% of glass. The new buildings of the Winchester Repeating Arms Co. have an average glass area of 58%.

An investigation covering 18 buildings constructed by the Aberthaw Const. Co., Boston, shows that the average window area is 57.5%.

These figures indicate how important the subject of lighting is now considered by employers of industrial labor, and how well the idea has been carried out by the architects and engineers, in order that all parts of a building may receive sufficient daylight. But, in addition to providing ample window space, there is another factor which is equally important, and that is, equipping the windows with the proper glass.

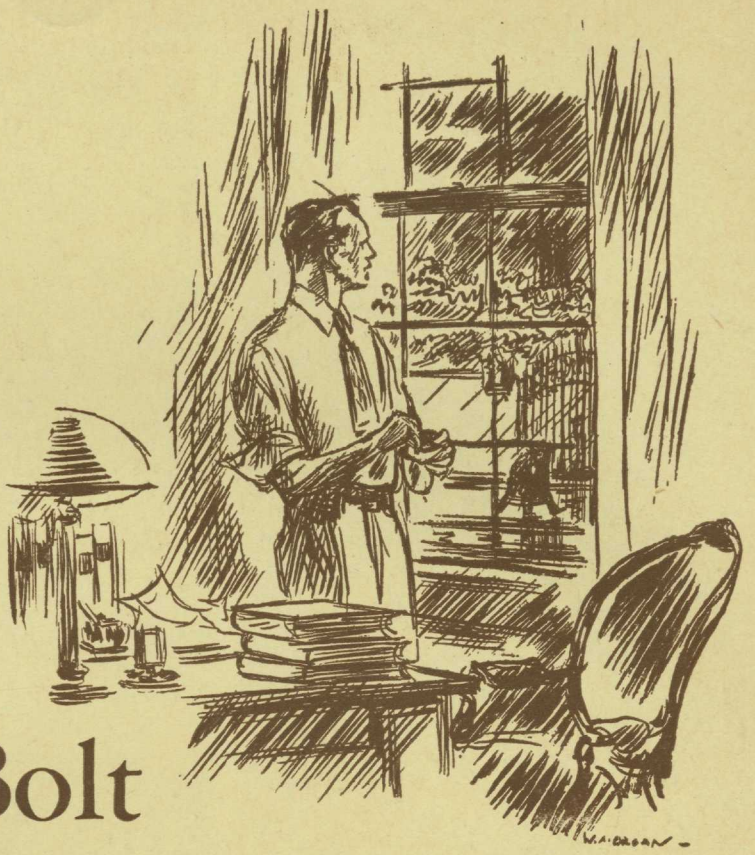
The bright direct rays of the sun should not be permitted to strike the eye, and we must provide a means for reducing the glare to rays which will not be too bright. This is accomplished by glass especially manufactured for industrial windows, known as Factrolite. This glass possesses the property of breaking up the intense rays of the sun and diffusing the light into the interior of the building in proper portions, solving the problem of sun glare.

If you are interested in the distribution of light through Factrolite, we will send you a copy of Laboratory Report—"Factrolited."

MISSISSIPPI WIRE GLASS CO.,
220 Fifth Avenue,
St. Louis. New York. Chicago.

The question is sometimes asked: Where do young men get when they enter a large industrial organization? Have they opportunity to exercise creative talents, or are they forced into narrow grooves?

This series of advertisements throws light on these questions. Each advertisement takes up the record of a college man who came with the Westinghouse Company after graduation and within the past ten years.



Engineer! Arrest that Bolt

JOSEPH SLEPIAN

THE Sales Department was talking in emphatic and easily understood language. It was saying, "We want action."

At Westinghouse, action in many cases is another word for research. And research works toward selected goals. In this case the goal was for new apparatus to make unchained lightning more respectful of power plants, lines and equipment.

Today, as a consequence, the electrical industry is the beneficiary of the "Autovalve Lightning Arrester", perfected to a degree of efficiency, long service and universal utility never dreamed of before. Behind that picture you find Joseph Slepian. With two degrees from Harvard, he started training in our East Pittsburgh Shops in 1916. A year later he entered the Research Department.

This was the lightning arrester situation which Slepian took into the research camp: There were two different types of apparatus. One, called the multi-gap, was used chiefly on poles of distribution circuits. When lightning struck, it frequently caused transformer troubles and damaged equipment. For high-voltage application there was the cumbersome electrolytic arrester. Its performance was good enough. But it required constant attention; was costly of upkeep; and could not be used on poles.

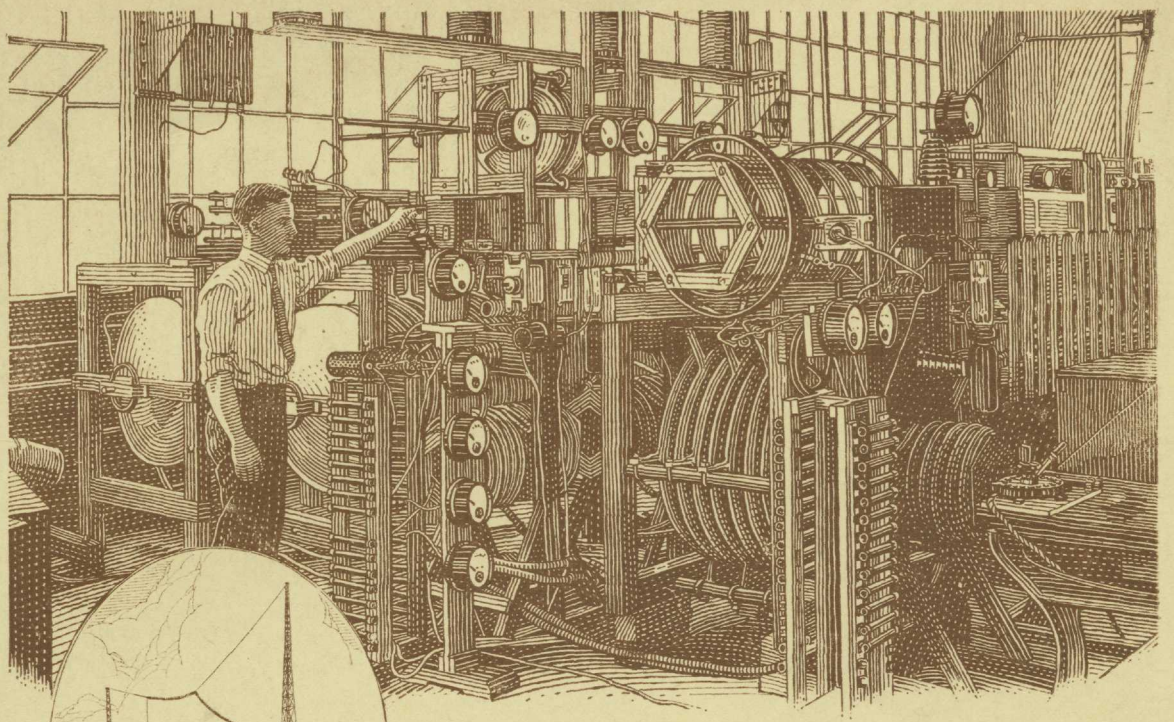
When Slepian perfected the Autovalve Arrester, the demand was so great that orders could not be filled. It was entirely new. One type of apparatus solved the whole problem—no more costly care. It stands up indefinitely, whether used on poles or on the ground—sufficient reasons for yearly sales exceeding $2,000,000.

Such results may depend as much on a phase of an engineer's past training as on his immediate research. Take the radio horn which gives the natural tone to Radiola sets. It was Slepian's mastery of mathematics, in which he specialized at Harvard, which contributed toward that big advance in the early days of loud-speaker popularity.

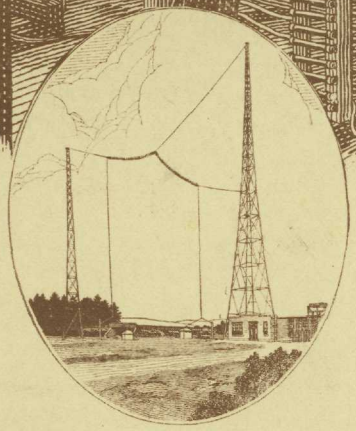
The man with "hidden reserves" is constantly finding them called upon to "climb peaks and cross mountains" in institutions like Westinghouse.

Westinghouse

WESTINGHOUSE ELECTRIC



One of the power amplifier stages of the world's first super-power transmitter



Antenna of super-power transmitter

The World's Loudest Voice

On the rolling plains of South Schenectady, in several scattered buildings, is a vast laboratory for studying radio broadcasting problems. Gathered here are many kinds and sizes of transmitters, from the short-wave and low-power sets to the giant super-power unit with a 50- to 250-kilowatt voice.

Super-power and simultaneous broadcasting on several wave lengths from the same station are among the startling later-day developments in radio. And even with hundreds of broadcasting stations daily on the air throughout the land, these latest developments stand for still better service to millions of listeners.

Only five years old, yet radio broadcasting has developed from a laboratory experiment into a mighty industry. And alert, keen young men have reaped the rewards.

But history repeats itself. Other electrical developments will continue to appear. And it will be the college man, with broad vision and trained mind, who will be ready to serve and succeed.

From the studio of WGY in Schenectady, six miles from the developmental station, there may be controlled a great number of transmitters, one of which is the first super-power transmitter in the world.
WGY, together with its associates, KOA of Denver and KGO of Oakland, is the General Electric Company's assurance to the American public that radio broadcasting shall be maintained upon the highest standards.

A new series of G-E advertisements showing what electricity is doing in many fields will be sent on request. Ask for booklet GEK-1.

95-138DH

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY, SCHENECTADY, NEW YORK